

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,322	11/12/2003	Enrique Carlos Leira	SLU 00-013	6487
33436 SAINT LOUIS	7590 05/03/200 UNIVERSITY	7	EXAM	INER
	NOVATION AND IN	GRAY, PHILLIP A		
3556 CAROLII SUITE C208	NE MALL		ART UNIT	PAPER NUMBER
ST. LOUIS, MO	O 63104		3767	
·			MAIL DATE	DELIVERY MODE
			05/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

A SHC WHICI - Extens after S - If NO p - Failure Any re earned Status	Office Action Summary The MAILING DATE of this communication age Reply PRTENED STATUTORY PERIOD FOR REP HEVER IS LONGER, FROM THE MAILING I sions of time may be available under the provisions of 37 CFR 1 IX (6) MONTHS from the mailing date of this communication. The oreply within the set or extended period for reply will, by statu- ply received by the Office later than three months after the mail	LY IS SET TO EXPIRE 3 N DATE OF THIS COMMUNI .136(a). In no event, however, may a	MONTH(S) OR THIRTY (30) DAYS, ICATION.
A SHC WHICI - Extens after S - If NO p - Failure Any re earned Status	The MAILING DATE of this communication aperated Reply PRTENED STATUTORY PERIOD FOR REPHEVER IS LONGER, FROM THE MAILING Is it	Phillip Gray opears on the cover sheet w LY IS SET TO EXPIRE 3 N DATE OF THIS COMMUNI .136(a). In no event, however, may a	3767 with the correspondence address MONTH(S) OR THIRTY (30) DAYS, ICATION.
Period for A SHC WHICI - Extens after S - If NO p - Failure Any re earned Status	REPLY ORTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING I stions of time may be available under the provisions of 37 CFR 1 IX (6) MONTHS from the mailing date of this communication. Deriod for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statutions.	LY IS SET TO EXPIRE 3 N DATE OF THIS COMMUNI	with the correspondence address MONTH(S) OR THIRTY (30) DAYS, ICATION.
A SHC WHICI - Extens after S - If NO p - Failure Any re earned Status	REPLY ORTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING I stions of time may be available under the provisions of 37 CFR 1 IX (6) MONTHS from the mailing date of this communication. Deriod for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statutions.	LY IS SET TO EXPIRE 3 N DATE OF THIS COMMUNI	MONTH(S) OR THIRTY (30) DAYS, ICATION.
WHICI - Extens after S - If NO; - Failure Any re earned Status	HEVER IS LONGER, FROM THE MAILING I sions of time may be available under the provisions of 37 CFR 1 IX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statu	DATE OF THIS COMMUNI .136(a). In no event, however, may a	ICATION.
1)⊠	patent term adjustment. See 37 CFR 1.704(b).	ite, cause the application to become A	NTHS from the mailing date of this communication BANDONED (35 U.S.C. § 133).
-	•		
2a)⊠ ⁻	Responsive to communication(s) filed on <u>16</u>	February 2007.	
	This action is FINAL . 2b) ☐ Th	is action is non-final.	
3) 🗌 🤃	Since this application is in condition for allow	ance except for formal mat	tters, prosecution as to the merits is
(closed in accordance with the practice under	Ex parte Quayle, 1935 C.I	D. 11, 453 O.G. 213.
Dispositio	on of Claims		
4) 🛛 (Claim(s) <u>1-38</u> is/are pending in the applicatio	n.	
4	a) Of the above claim(s) is/are withdr	awn from consideration.	
5) 🗌 (Claim(s) is/are allowed.		
6)⊠ (Claim(s) <u>1-38</u> is/are rejected.		
7) 🗌 (Claim(s) is/are objected to.		
8) 🗌 (Claim(s) are subject to restriction and	or election requirement.	
Application	on Papers		
9) 🔲 T	he specification is objected to by the Examir	ner.	
10)□ T	he drawing(s) filed on is/are: a) ac	ccepted or b) objected to	by the Examiner.
,	Applicant may not request that any objection to th	e drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).
1	Replacement drawing sheet(s) including the corre	ection is required if the drawing	g(s) is objected to. See 37 CFR 1.121(c
11)□ T	he oath or declaration is objected to by the B	Examiner. Note the attache	ed Office Action or form PTO-152.
Priority u	nder 35 U.S.C. § 119		
12) 🗌 A	acknowledgment is made of a claim for foreig	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).
a)[All b) Some * c) None of:		
	1. Certified copies of the priority docume	nts have been received.	
:	2. Certified copies of the priority docume	nts have been received in A	Application No
;	3. Copies of the certified copies of the pri	iority documents have beer	n received in this National Stage
	application from the International Bure	au (PCT Rule 17.2(a)).	•
* Se	ee the attached detailed Office action for a lis	st of the certified copies no	t received.

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date.

5) Notice of Informal Patent Application

6) Other: ____.

DETAILED ACTION

This office action is in response to applicant's communication of 2/16/2007. Currently claims 1-38 are pending and rejected below.

Response to Arguments

Applicant's arguments with respect to claim 1-38 have been considered but are moot in view of the new ground(s) of rejection.

Further concerning the amendments to the claims of "the valve can be in only one of two positions", a first completely obstructing position and a second position with a non displaced rod and unrestricted flow from inlet to outlet, it is examiners position that Duffy discloses such an operation (see abstract, and paragraphs at columns 4 line 25 through column 5 line 20 and "first position" in figure 2 and "second position" in figure 4). The elements disclosed in Duffy are fully capable of satisfying all structural, functional, spatial, and operational limitations in the amended claims, as currently written, and the rejection is made and proper. See rejection discussion below.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "valve that can be in only one of two positions" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Art Unit: 3767

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7,13,16-22,24, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Duffy (U.S. Patent Number 6,050,973).

Duffy discloses an automatic flow control device, method, and kit, which is used for collecting a fluid comprising a pressure sensitive valve (as in figure 2 through 4). The Duffy device valve comprises a housing (30,80) and inlet (near 36), an outlet (near 66 with affixed tubing 37), a fluid channel (76), and a cylinder shaped rod (70) which can completely obstruct the communication between the inlet and outlet such that when a pressure differential between the inlet and the outlet is at or greater than a preset value, the rod is displaced to obstruct the fluid from flowing from the inlet to the outlet and when the pressure differential between the inlet and the outlet is less than the preset value, the rod is not displaced to allow the fluid to flow from the inlet to the outlet, and valves (see abstract, and paragraphs at columns 4 line 25 through column 5 line 20). This rod is connected to the outlet by a spring (84) and retaining pin (82 for example). Further the Duffy rod is perpendicular to the fluid channel (as the fluid enters opening 37) or inline (near 76 and opening 36), has a constriction opening (aperture on rod near 76) and a rod channel contiguous with the fluid channel (see figures 1-4).

Further concerning the amendments to the claims of "the valve can be in only one of two positions", a first completely obstructing position and a second position with a non displaced rod and unrestricted flow from inlet to outlet, it is examiners position that Duffy discloses such an operation (see abstract, and paragraphs at columns 4 line 25 through column 5 line 20 and "first position" in figure 2 and "second position" in figure 4). The elements disclosed in Duffy are fully capable of satisfying all structural, functional, spatial, and operational limitations in the amended claims, as currently written, and the rejection is made and proper.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-11, 12, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duffy.

Concerning claims 8-11, Duffy discloses the claimed invention except for the preset value is at or greater than 10 mm of H2O, 50 mm of H2O, 100mm of H2O, or between 179mm and 221mm of H2O. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a preset value is at or greater than 10 mm of H2O, 50 mm of H2O, 100mm of H2O, or between 179mm and

Art Unit: 3767

221mm of H2O, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)* and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller, 105 USPQ 233 (CCPA 1955)*.

Concerning claims 12 and 23, Duffy discloses the claimed invention except for the fluid comprising body fluid, blood, or CSF. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the fluid be body fluid, blood, or CSF, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960)*.

Claims 14,15, 25, 26, and 28-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duffy in view of Bierman (U.S. Patent Number 2,535,998).

Duffy discloses the claimed invention except for the stopcock, threeway valve, needle and manometer assembly is affixed to the outlet from the housing. Bierman teaches that it is known to use a stopcock, threeway valve, needle and manometer assembly is affixed to the outlet from the housing as set forth in paragraphs at columns 1-3 to provide an ability for the pulse to be observed and control fluid flow by stopping. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the flow control system as taught by Duffy with the stopcock, threeway valve, needle and manometer assembly is affixed to the outlet from the

Art Unit: 3767

housing as taught by Bierman, since such a modification would provide the flow control system with a stopcock, threeway valve, needle and manometer assembly is affixed to the outlet from the housing for providing an ability for the pulse to be observed and control fluid flow by stopping.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gray whose telephone number is (571) 272-7180.

Application/Control Number: 10/706,322 Page 8

Art Unit: 3767

The examiner can normally be reached on Monday through Friday, 8:30 a.m. to 4:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KEVIN C. SIRMONS

Kuri C. homons